

**HYDRAULICALLY-ACTUATED
INJECTOR WITH DELAY PISTON
AND METHOD OF USING THE SAME**

ABSTRACT OF THE DISCLOSURE

5 An oil activated fuel injector which provides a pilot quantity of fuel prior to the
main fuel injection event. The oil activated fuel injector includes a delay piston assembly
in fluid communication with a high pressure chamber of the fuel injector. The pilot
quantity of fuel flows through the delay piston during a pre stroke of the plunger. The oil
activated fuel injector reduces engine emissions and noise, and eliminates the need for
10 additional working fluid to be provided therein in order to provide a pilot quantity of fuel.